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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,032	10/03/2000	Mark B. Lester	1671-0099	5677

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EXAMINER

LANDREM, KAMRIN R

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/678,032

Applicant(s)

LESTER ET AL.

Examiner

Kamrin R. Landrem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: There is no clear relationship set forth between the imaginary hemisphere and the cup.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It appears that the applicant is claiming an "imaginary hemisphere". It is unclear as to what applicant is claiming.

Claim 38, see claim 31.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pratt et al (5,888,205) in view of Amstutz et al (USPN 4,123,806).

Pratt et al. discloses the use of a hemispherical shaped reaming tool to prepare the acetabulum for a low-profile acetabular cup design that is less than a hemisphere. Pratt et al. also discloses the technique of using a reamer that is approximately 2 mm smaller than the desired acetabular cup to insure a secure press-fit. Amstutz et al teaches the use of an acetabular cup that is a millimeter or two less than hemispherical in extent to avoid interference with the femur. Therefore in view of the teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the acetabular cup of Pratt to be less than hemispherical (1-2 mm) to avoid interference or impingement, thereby providing the patient with a full range of motion.

Claims 31 and 38, with regards to a prosthetic hip and reamer assembly comprising a reamer, an acetabular cup having an upper rim which lines in a plane P2, and is spaced apart from an imaginary hemisphere in plane P1 by distance D, wherein $0.5 \text{ mm} \leq D \leq 2.0 \text{ millimeters}$. With regards to between the acetabular cup and an imaginary hemisphere may be a millimeter or two less than hemispherical, see col. 6, lines 5-10 of Amstutz. With regards to reamer and method of press-fitting cup, see Pratt et al. col. 1, lines 60-67 and col. 2, lines 1-13.

Claim 32, with regards to approximately 1 millimeter, see col. 6, lines 5-10 of Amstutz.

Claim 33, with regards to cutting head of reamer that is substantially hemispherical, see col. 1, lines 60+ of Pratt. It is obvious that if the reamer were used to prepare the acetabular cup

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for the implant as disclosed in claim 31 (approx. 2mm less than a hemisphere) then the reamer itself would possess a radius that is less than the radius of an imaginary hemisphere.

Claim 34, with regards to radius, see col. 6, lines 5-8 of Amstutz and col. 2, lines 9-11.

Claim 35, see Claim 34.

Claim 36, with regards to bearing insert, see Fig. 2 and col. 2, lines 53-65 of Pratt.

Claim 37, with regards to placement of cup in regards to surface of acetabulum. It is well known in the art to press fit into place the acetabular cup so that it is substantially flush with a surface of the acetabulum to avoid impingement and allow full range of motion. See also, col. 7, lines 34-38 of Amstutz.

Claim 39, see claim 32.

Claim 40, see claim 33.

Claim 41, see claim 34.

Claim 42, see claim 34.

Claim 43, see claim 36.

Claim 44, see claim 37.

Response to Amendment

The Office acknowledges the amendments to the drawings and specification as requested in the First Office Action. The Office acknowledges the cancellation of claims 1-30 and the addition of new claims 31-44.

In regards to new claims 31-44, applicant's claims are found to be unpatentable in view of the teachings of Pratt and Amstutz. The original objection in view of Pratt is still relevant and is further supported by the less than hemispherical cup used by Amstutz (col. 6, lines 5-8).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamrin R. Landrem whose telephone number is 703-305-8061. The examiner can normally be reached on 8:00-5:00, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone numbers for

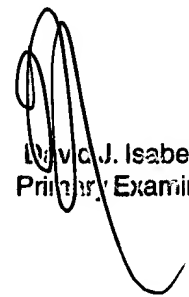
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the organization where this application or proceeding is assigned are 703-308-3905 for regular communications and 703-308-3905 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Kamrin Landrem
Examiner
AU 3738

KRL
April 7, 2003



Vivian J. Isabella
Primary Examiner